



FLWEMS Paramedic Medication Information For:  
**RACEMIC EPINEPHRINE**

**Indications**

Moderate to Severe Croup  
Respiratory Syncytial Virus (Bronchiolitis)

**Mechanism**

Alpha-adrenergic effect  
Mucosal vasoconstriction decreases subglottic edema  
Rapid response in croup (within 10 minutes)  
Consider Croup Differential Diagnosis if no response  
Effect dissipates in 2 hours

**Pharmacokinetics**

Effects last 90 to 120 minutes

**Precautions**

Avoid too frequent use due to tachyphylaxis  
Observe 2-4 hours after racemic Epinephrine  
Patient may go home safely if no worsening in 3 hours

**Dose**

Nebulizer mix  
Racemic Epinephrine (2.25%)  
Child under 6 months: 0.25 ml  
Child: 0.5 ml  
Adolescent: 0.75 ml  
Normal Saline 2.0 to 3.5 ml  
Frequency of dosing  
Nebulized Epinephrine may be repeated in 30 minutes  
Monitor Heart Rate closely with repeat dosing

**Efficacy: Bronchiolitis**

Significantly more effective than Beta-agonist  
Reduced hospital admissions significantly  
Reduced time spent in emergency room significantly  
References

**END OF INFORMATION – NOTHING FOLLOWS**